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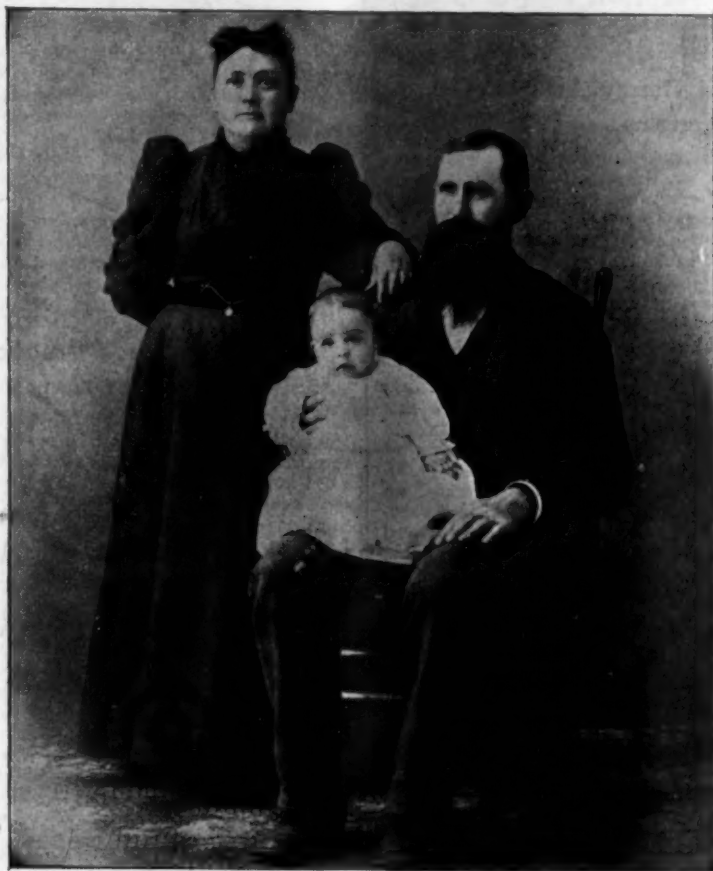
Loaded Field-Bees in the Sections.

BY G. M. DOOLITTLE.

There is much being said of late about raising hives up from the bottom-board, and providing the large entrances to

deposit their honey where it is wanted. And the claim is also put forth that by so doing the bees can more easily enter the sections, as they do not have to crowd their way up through the center, or most populous part of the hive, as they do when only the ordinary entrance is used. Of one thing all the advocates of this plan seem to be sure, which is, that unless the bees are thus forced to go from the fields to the sections with their loads of nectar, the same will of necessity be deposited by these bees in the comb-cells of the brood-chamber.

Now I wish to ask each of the gentlemen thus arguing, what reasons they have for believing that field-bees ever deposit their loads of nectar directly in the cells? Mr. Golden, I believe, claims that he knows that they do this, but if he has told us *why* or *how* he knows it, I have failed to see the place.



Mr. R. C. Atkin (and Family), President of the Colorado Bee-Keepers' Association.—From *Gleanings*.

those not fully raised, as above, so that the field-bees, with their loads of nectar, may be obliged to pass up the sides of the hive to the surplus receptacles, thus compelling them to

This craze that has come over the people for "high-up" entrances reminds me of a similar craze along about 30 years ago, when it was thought necessary to have from one to four

entrances direct into the surplus apartment, beside the lower or main entrance; for, in this way, the bees were saved all the extra travel up through the crowded hive. And then, as they could fly direct to these upper entrances much time would be saved, as the bee could fly much faster than it could go on foot, even tho the lower part of the hive was empty. Thus a much larger yield of honey could be secured to the owner, for "time was honey" when the honey harvest was on.

Along about this time E. Gallup, I think it was, made the discovery and gave it to the world, that the bee which collected the nectar did not deposit it in the comb, but when it came into the hive with its load it gave that load to another bee—usually a bee so young as not to have become a field-laborer yet—the young bee holding the nectar in its honey-stomach till it was evaporated to the consistency of prime honey, when this young bee deposited it in the cells, wherever it was most needed, whether in the surplus apartment or in the brood-chamber. A few tried to argue Dr. Gallup down, but he had the proof on his side by telling how he saw the field-bees pass their loads of nectar over to the younger bees, how the nectar was evaporated, etc. This upset the direct-to-surplus-apartment-entrance plan, and to-day no such entrances are seen, except, perhaps, on some old hives which have been stored away for years.

Being of an investigating turn of mind, I wisht to prove which was right—Gallup or the others—so some 25 years ago I constructed observatory hives, beside which I have watcht for hours, both day and night, and every observation proved Gallup to be right. Then the "rightness" of his ideas was also proved many times over by a change of queens from black to Italian, and *vice versa*, when at the proper time, before any of the new queens' bees became field-laborers, all the workers from the original queen would be seen coming in with their loads of nectar, while the sections revealed scarcely a bee but those from the newly-established mother.

If Gallup and myself are right, this doctrine now being put forth is as fallacious as was the old multiplicity-of-entrance plan, and if fallacious, it would be well to know it, for such knowledge will save much work to our bee-keepers when the little each one does along this line is put into the aggregate.

Onondaga Co., N. Y.



Ripening Extracted Honey Artificially.

BY E. B. TYRRELL.

I promist to write concerning the ripening of extracted honey. I must thank Mr. J. A. Bearden for his article on page 66, but he mistook my meaning, for I am in favor of artificial ripening of honey, providing it is practical. Altho I am not speaking from experience, yet for the sake of drawing out arguments and opinions of those who have had experience and getting at the truth of the matter as I wish to ripen artificially, if I can, and yet do not wish to make a mistake, I will take the artificial side of the question.

I will take the position that ripened honey is that which reaches a certain consistency, or thick enough so that a saucer of it when cold may be turned upside down without running out, and it doesn't make any difference whether it reaches this consistency while in the hive or out of it.

Admitting this to be a fact, I will venture the statement that honey can be brought to this consistency as well artificially as by the bees, because heat produces evaporation no matter in what way applied, and if honey is placed in a shallow pan with a large surface I can see no reason why it will not ripen as well as the bees can ripen it. Of course, no doubt the bees may ripen it faster, as the fresh nectar gathered each day must be reduced as much as possible during the night to make room for the next day's harvest.

Many, and in fact nearly all, writers admit that more honey may be secured if extracted as fast as gathered, and will not this extra honey pay for any extra labor implied by extracting during the flow? I believe that the reason that more honey is secured by extracting as fast as gathered must be because it draws from the field-force as well as from the honey to build the cappings, and as these cappings are of no use to the extracted-honey producer (except for beeswax), and in fact are a nuisance; for who would not rather extract honey from comb with no cappings, and especially this honey, than to be bothered with an uncapping-can and an uncapping-knife, making a slow, sticky job out of what would otherwise be fairly clean? I believe uncapping takes all the flower from extracting, and if I can do away with the uncapping can and knife I certainly shall do it.

Now, if you don't agree with me (and you certainly all don't) just jump right up and knock my theories all to pieces with facts; it certainly will take facts to convince me I am

wrong, and if your facts are good I am willing to be convinced, but I believe that this talk about artificially ripened honey not being as good as naturally ripened honey is nearly all prejudice, and most of those who extract after the harvest have not tried the other way, or else *did not do their very best in artificial ripening, and attend to every detail.*

Now, I don't wish any one to go into artificial ripening of honey on account of what I have said, but I do wish to know the truth about this matter, as it means dollars to me; and any light on this subject through the Bee Journal will be gratefully read by me.

Genesee Co., Mich.



Something More About Section-Cleaners.

BY J. A. GOLDEN.

Upon request I am glad to give my experience as to propolis sticking and gumming the sandpaper when in a soft condition, which explanation inadvertently was overlooked in my former article.

Yes, if a section contains much propolis upon its surface, like sections when oilcloth is used over them, or any section badly gummed up; but as I use, in my method, a bee-space only, I have but little chunk propolis. In taking sections from the supers I use an old jack-knife to take off any bulky surplus propolis as I lift the sections out, consequently what remains on the sections I do not find any inconvenience in cleaning every vestige of stain and propolis from the section. As I am not a large producer, I usually set what honey I want to dress in the cellar until it is cool—sometimes over night—and dress it in the morning.

My experience is that a pretty coarse sandpaper—about No. 3—would be better than a finer grade. Of course the polish is not so nice.

On the wheel device, which was illustrated in the American Bee Journal, I cleaned over 1,000 sections beautiful and bright as ever was put on the market by any bee-keeper, before re-coating the wheel with sandpaper.

To re-coat, take a sponge and saturate thoroughly with hot water, then strip the old paper off and apply a new coating.

There is a great difference as to how a section is held to avoid gumming. If it is held crosswise the grain of the wood there is but little danger of propolis sticking, but if held the opposite the paper does not cut the wood so readily. That is my observation, at least.

There is also another thing, let me here add. If leakage, honey daubed on the section or propolis, it is sure to stick on the sandpaper belt or wheel. Of course, no one would expect a machine to overcome this, but if wiped off the work will be complete; but after propolis becomes hard I did not find a single section that caused any gumming of the wheel.

Morgan Co., Ohio.



Do Italian Bees Produce Better Honey?

BY EDWIN BEVINS.

It is with considerable hesitation that I attempt to answer the question of Mr. Hart, on page 269, because he confines the privilege of answering to the wise ones in apiculture, and I am not one of these. Then an editorial foot-note suggests that the question affords a chance for some one to distinguish himself, and I am not writing for distinction. Nevertheless, I am going to say something in the way of reply to Mr. Hart's question, as to why the Italian bees produce a better quality of honey than the blacks or others.

I do not know just how extensive Mr. Hart's reading has been, but this is the first time that I have known any bee-keeper to intimate that the quality of the honey produced by Italian bees was any way superior to that produced by other bees. Many times it is claimed that there is a difference in the whiteness of the cappings of the honey, but this difference is in favor of the blacks and some others, and against the Italians. As to the honey itself, I have never seen an opinion that the quality of the honey produced by any one race of bees was superior to that produced by the other races where all had access to the same sources of supply.

Mr. Hart thinks the difference, if there is any, may be accounted for on the supposition that the Italians are better mechanics or chemists than other bees, if it is a fact that bees make honey. Now, I believe that Mr. Hart is satisfied in his own mind that bees do not "make" honey. He is giving undue deference to the opinions of some who do not know much about bees, and yet can do considerable talking about them. The ignorance which leaves one to believe that bees make

honey may be excusable in the gentiles, but a child of Israel who has past through the Red Sea and the wilderness, and arrived at a land flowing with milk and honey, and still entertains the opinion that bees make honey ought to be ashamed of himself.

Then Mr. Hart comes at us with another *if*, which is entitled to no more consideration than the first one. *If* the Italians have longer tongues than other bees, it is an unquestionable fact that not many of them have tongues long enough to gather honey enough from red clover to cut any figure. Besides, who is able to say that the honey of red clover is any better than the honey of white clover? Has any one compared the honey from a bumble-bee's nest with the honey stored in sections in the midst of white clover bloom?

It looks a good deal as if Mr. Hart was "putting up a job" on bee-keepers, to get them to account for a difference which does not exist. I will therefore turn the work over to some one wiser and more covetous of distinction than I am.

Decatur Co., Iowa.



Watering Bees—Feeding—Cleaning Hives.

BY MRS. L. HARRISON.

I think watering bees is important. They should be accustomed early in the season to find water in the apiary, and not be frequenting watering-troughs, cisterns and wells. On cool mornings the water should be warm. Up to date (May 9) we fill their drinking-vessels with warm water, and are paid for doing it in preserving the life of many a bee. Wash them out occasionally, and put in a pinch of salt.

FEEDING BEES.

We keep a regular feeding-ground, and no robbing has ever been induced thereby. All sticky papers, sections or cases are put there for the bees to clean up. Any bits, or odds and ends of comb, the accumulation of the winter, are put there for the bees. When robbers attack a queenless colony we let them alone, and when they get all the honey gone and take the bees along. If the hive and stores are taken from them they will then try to rob other hives, and trouble ensues. When they are through, the hive can be cleaned and be in readiness for a swarm.

CLEANING HIVES WHERE BEES DIED.

Where colonies have died during the winter the bees should not be allowed to remain and rot, but pry up the combs, brush off the dead bees, and scrub out the hive, pouring in boiling water from the spout of a kettle, and turn it up to dry. Cut off all old queen-cells, and remove the drone or very thick, undesirable comb. The bees that are in the cells can remain and will rattle out out when dry, or when given to the bees they will remove them, working cheaper than we can. This hive will then be a bonanza when a swarm issues.

ADULTERATION OF BEESWAX.

Those who sew carpets and manufacture overalls call frequently for beeswax, saying that what they buy at stores is not good—has grease in it. Are there complaints of this kind elsewhere?

Bees wintered well in this locality, and the spring has been favorable for the rearing of brood. They did well on peach and cherry bloom, which has just past; but there was very little bloom in this immediate neighborhood. Dandelions are very abundant, and fill the interim between fruit-bloom and clovers.

Peoria Co., Ill.



National Bee-Keepers, Union—13th Annual Report—for 1897.

BY THOMAS G. NEWMAN.

The appeals for assistance are the largest for any year in the history of the Union, and cover all phases of trouble—briefly reviewed as follows:

PROHIBITING BEE-KEEPING.

As stated in our last Report, the City Council of Clarinda, Iowa, was petitioned to pass an ordinance prohibiting the keeping of bees within the corporate limits. The Union forwarded to the Mayor, City Attorney, and each member of the City Council, copies of the "Decision of the Supreme Court," on the point at issue.

After some delay it came before the District Court. The Union's attorney was supplied with abundant ammunition to show that bees do not injure fruit, and the Union was victo-

rious. There were several apiaries there, and the rights of apiarists were maintained. The chief apiary there belonged to Mr. J. C. Strong, against whom the suit was brought.

WANTED THE APIARY REMOVED.

Thos. C. Stanley & Son had about 150 colonies of bees in Fairfield, Ills., where they owned 32 lots. A neighbor who owned a lot or two petitioned the City Council to order the bees removed as a nuisance. We wrote personal letters to the Mayor and each of the aldermen, and sent them copies of the Supreme Court decision, showing that bees are not *per se* a nuisance, and could not be legislated against in "omnibus." We informed them that should they pass such an ordinance as was prayed for, abridging the rights and privileges of bee-keepers, it would become the duty of the Union to test it in the Courts, as it abridged rights guaranteed by the Constitution of the United States. Our attorney attended the meeting of the Board, and argued the case as outlined by the General Manager. That ordinance then and there died a natural death. Mr. Stanley wrote thus: "We thank you for the assistance of the Union." Record another victory for the Union!

DR. BESSE'S SWEET CLOVER FIELD.

This case was mentioned in our last year's Report. The Township Trustees, against this protest, cut down his planted field of bee-pasture (three acres of sweet clover), and then charged him \$27.20 as fees for doing the damage. This deprived his bees of pasture, and cut short his honey crop in consequence. He sued the township and appealed to the Union for assistance. The case has been postponed from time to time, and is yet untried. The Union has contributed \$75 to aid in taking testimony showing that sweet clover was not a noxious weed, but a good honey-plant and an excellent bee-pasture. The case will come up again for trial at the January term of the Court, and the Union is doing all in its power to secure justice for the Doctor.

[This suit came up for trial in January last, as stated, and was lost by Dr. Besse.—EDITOR.]

BEES "EATING" FRUIT.

O. W. Stearns, of Selma, Calif., had neighbors who claimed that his bees ate their fruit, and circulated a petition last June to have them declared a nuisance, and ordered to be removed. We sent the Union documents to each of his neighbors, showing that bees do not puncture the skins of fruit. We arranged for an attorney to attend the meeting of the Council, and present the facts in the case, but so far the petition has not been presented, tho it is six months ago. The prompt action of the Union doubtless settled the disturbance.

TROUBLE WITH FRUIT-MEN.

Mr. A. Unterkircher has an apiary at Riverside, Calif., and the fruit-men began proceedings to drive him away, averring that the bees destroyed their fruit. The Union's batteries were opened upon them, and a shower of documents in that locality proved that bees were incapable of puncturing the skins of grapes, etc. The Manager gave some points of law to the interested parties, which soon ended the trouble. Last January Mr. U. wrote to the Manager that he was proud of being a member of the Union, which had so completely silenced all his unreasonable opponents, and added: "No bee-keeper, great or small, can be at home outside of the Union. The bare statement that I was a member of the Union at once silenced all opposition."

AN INHUMAN NEIGHBOR.

John Uphouse, of Sedro, Wash., had an envious neighbor who, when a swarm had settled on his lot, and the son of Mr. Uphouse had watched it, and went with a hiving-basket to bring it home, the neighbor attacked the son and shook the bees from the basket down over the boy's head, saying he hoped the bees would sting him to death. He was badly stung, and the inhuman neighbor was sued by Mr. Uphouse. The Union posted the attorney in charge as to the rights of bee-keepers to follow swarms and capture them, and dosed the neighborhood with decisions of the Supreme Court, and the pamphlet entitled, "Bees and Flowers." Now peace is restored in that neighborhood.

TROUBLE ABOUT A SWARM.

August Bachman, of Seattle, Wash., had a swarm last July settle in a neighbor's lot. His wife saw the swarm alight, but was refused permission to enter the premises to take the swarm away. The neighbor did not own the lot, but had the privilege of keeping chickens there. The owner gave written permission to Mr. Bachman to take the swarm, but the occupant refused to let him enter. He got a constable

and took the bees away, but the neighbor claimed them as his property, and sued Mr. Bachman for them; and the justice decided in Mr. Bachman's favor. Then the neighbor appealed the case; and Mr. Bachman appealed to the Union for defense. Being a member of the Union we gave the points of law in the case to our attorney, who made good use of them, and the jury decided in favor of the owner, and the pugnacious neighbor had to pay the costs—another victory for the Union.

DECLARING BEES A NUISANCE.

Mr. W. A. Webster, a member in Pylema, Calif., last March reported that a petition had been circulated there, asking the Supervisors to prohibit the keeping of bees in that place by a city ordinance, and askt us for instructions as to what to do in the matter. We replied with advice, and documents for circulation. By posting the Board of Supervisors in advance about the unconstitutionality of such an ordinance if past, the members were fully prepared to deal with the matter, and promptly denied the petition. Thus defeated, they made trouble in Mr. Webster's apiary by overturning the hives and stealing the honey at night. We advised Mr. Webster to let it be understood that he was a member of the National Bee-Keepers' Union, and that we would make it *hot* for any one found meddling with the hives or bees. He did so, and that trouble also ceased.

COMMISSION MEN'S RATES.

In the case of S. T. Fish & Co., mentioned in my last Report, being a disagreement about the rate of commission on several carloads of honey, amounting to over \$200—altho we have written scores of lettres, the important documentary proofs have not been produced on which to successfully establish the claim—several letters having been mislaid or lost. Until these are found no further progress can be made. We regret this, because we have already spent so much time, labor and expense on the case. The Chicago commission men repudiate the contract made by their representative at 5 per cent. commission, and claim that the 10 per cent. they deducted is their regular commission. When proof is produced the case can be continued, but not before.

DEPREDACTIONS ON AN APIARY.

J. Kendall, of Blodgett's Mills, N. Y., complained that depredations were made on his apiary in the night, out of spite. We advised him to put up a sign stating that any one trespassing on his premises would be prosecuted—then if the miscreants could be found they would be dealt with according to law, and the Union would help to do it.

THREATENS TO POISON THE BEES.

Among the cases which are now on the docket is one in Pennsylvania, where a neighbor refused to allow a bee-keeper to enter a yard where a swarm had alighted, to capture it and take it to a hive—one that had a prized queen. Of course it went to the woods and caused a loss. In this case we have had a voluminous correspondence, as the neighbor threatened to poison the bees, and was otherwise pugnacious. We wrote to this neighbor demanding reparation. What the outcome will be is yet undetermined. It is not wise to give any further particulars in this Report.

DISPUTE ABOUT HONEY SALES.

Early in January Thos. C. Stanley & Son, of Fairfield, Ill., complained to the Union about the sale of some honey shipt to C. F. Muth & Son, of Cincinnati, Ohio, proposing that it be submitted to arbitration. We wrote to C. F. Muth & Son, and the matter was submitted to the following arbitrators: J. M. Hambaugh, A. I. Root and Eugene Secor.

Long documents were prepared by each party and sent to us, we forwarding these statements to each arbitrator, and having his decision reserved to be mailed to us on a certain day far enough in advance for all to come at once. These decisions were collated, summarized and reported to both disputants, who agreed in advance to abide the decision. This entailed much labor in type-written copies, documents, letters, etc., amounting to hundreds of pages.

The decision was rendered—then appealed from by C. F. Muth & Son—and re-submitted, reviewed, re-affirmed, and re-reported—covering a period of eight months, but the award of \$10 to T. C. Stanley & Son has not yet been paid.

LAWS RELATIVE TO APIARIES.

Reports have been circulated stating that the laws of California compel bee-keepers to remove apiaries from the vicinity of fruit-drying establishments, and restricted the location of apiaries to certain distances from such. Hon. J.

M. Hambaugh and others wrote to us inquiring as to the distances named, if such were legal enactments.

It was also reported that bee-keepers were required to shut up the bees during fruit-drying periods. Failing to do so, the bees may legally be enticed by poisoned sweets and destroyed. We were requested to look up the laws and ascertain what truth there was in such statements.

We went to the law office of a Judge of the Supreme Court, and made a thorough examination of the laws of California, but found no law in the Code containing any restriction relative to the location of apiaries, either specifying nearness to fruit-drying establishments or anything like it. Neither could we find any law allowing fruit-men (or any other men) to entice or entrap bees, for the purpose of destruction, under any circumstances.

The Judge who assisted us in this search has one of the largest law libraries in the State, and he assured us that there was absolutely no foundation for any such a report. If any such laws were enacted they would, he said, be unconstitutional.

This is an important matter, and we therefore mention it in this Report. Mr. Hambaugh was a member of the legislature of Illinois, and rightly concluded that if there was any such law "surely something is needed in the way of legislation in behalf of the bee-keepers of California." But such a law does not exist.

BEES NEAR HIGHWAYS.

Many threatened disturbances about bees being kept near highways have come up, and we have answered many letters advising bee-keepers to keep their apiaries far enough away to prevent the bees from being jarred by passing teams or



Thomas G. Newman.

annoyed by sweating horses, because either of these may cause trouble; to erect a high board fence where an apiary is near neighbors' residences, and otherwise to prevent annoyance. These matters have caused considerable correspondence, but have prevented many cases of neighborhood troubles.

PUT A BEE-KEEPER IN JAIL.

Frank S. Buchhelm, of Santa Ana, Calif., a member of the Union, in September, 1897, was arrested, under Sec. 370, of the Penal Code of California, for keeping 100 colonies of bees on his premises, charging him with maintaining a nuisance in the neighborhood, averring that the bees ate up and destroyed the fruit belonging to the neighbors, and interfered with laborers who were engaged in caring for the fruit, etc. His apiary and premises cover $7\frac{1}{2}$ acres. He built a fence 6 feet high to enclose 24x32 feet, in which he kept the hives of bees during the fruit-drying season, thus controlling the bees and preventing annoyance to the neighbors. But they were not satisfied with these precautions, and demanded that the bees be moved out of that locality.

Suit was brought against Mr. Buchhelm for maintaining a public nuisance, and he was fined \$50 and costs. As he was a poor man with a large family to support, he did not pay the fine, and was committed to jail for 25 days.

After 10 days had elapsed an appeal was taken to the Supreme Court, and he was released pending appeal.

The Union being appealed to for assistance, we collated some points of law upon the case to aid the attorney, and gave

advice on the course to be pursued, sending the Union's documents to be scattered among the interested parties. Meanwhile the Advisory Board decided that the Union should take part in Mr. Buchheim's defense. It is expected that the appeal to the Supreme Court will be heard in a short time, when a lively time will be given to the enemies of the pursuit.

ARE BEES A NUISANCE?

F. H. Hunt, of Redlands, Calif., has been sued by W. F. Whittier for damages, and prays for an injunction restraining him from keeping bees within one mile of his land, claiming that the bees befoul the water used for irrigating and domestic purposes, also sting men who work in the adjoining field to the apiary. Mr. Hunt's apiary was located there before Mr. Whittier planted his orchard, and should have prior right to the location—if there is to be any preference.

We have corresponded with the attorney in charge of the defense, and have given all the aid in our power, stating many points of law relative to the rights of bee-keepers, and furnished him with the Union's ammunition, printed arguments and decision of the Supreme Court of Arkansas, etc. The trial is to come off on Jan. 12, 1898, and we hope will be another victory for the rights of apiarists.

This case is of unusual interest, for many California apiarists are in danger of similar lawsuits instigated by fruit-men who are sworn enemies of the pursuit.

THOMAS G. NEWMAN, General Manager.

2096 Market St., San Francisco, Calif.

[While we are a little late in publishing the foregoing report, it nevertheless will be interesting reading, as it shows what the National Bee-Keepers' Union did during the year 1897. But we are now enabled, by the delay, to show our readers—many of whom are Mr. Newman's old friends—a reproduction of his latest photograph, which, to us, seems to indicate that his residence in California has not tended to improve his health very much.—EDITOR.]

CONVENTION PROCEEDINGS

Proceedings of the Colorado State Convention.

REPORTED BY F. L. THOMPSON.

[Continued from page 310.]

The Honey-Industry in Colorado.

It seems that some member of the Horticultural Association lately claimed that our spraying law could not be enforced, and added something to the effect that bee-keeping was of small importance. I do not know who the man was, except that he was some Western slope man, and do not know his exact words.

I will consider his last assertion or implication first. Our Secretary has fairly reliable data to show that last year's product of the Eastern slope alone in comb honey was about 1,000,000 pound sections. I learn on good authority that Grand Junction sent out six carloads, and that the other portions of the Western slope sent out not less than six more, making 12 in all, or 240,000 pounds. Let us call the net gain on comb honey 5 cents a pound. That is surely low enough. Then 1,240,000 pounds of comb honey at 5 cents a pound represents a net gain to the State of \$62,000. I do not know how much extracted honey was produced; doubtless several hundred thousand pounds.

VALUE OF HONEY.

The farm honey of the Western slope is also not included in the above estimate. All in all, the lowest estimate of the direct cash value of the honey-industry cannot be less than \$70,000. But this is only half the story. R. L. Taylor, of Michigan, who was director of the Apicultural Experiment Station for several years, stated that the benefits arising from the cross-fertilization of blossoms by bees are worth more to the people at large than the cash value of the honey itself. He is a horticulturist as well as a bee-keeper. I have never seen

that statement contradicted; and, indeed, I do not suppose it can be, as many proofs show that such benefits are great, not only to the fruit-men, but also to gardeners and farmers. We might, then, modestly place the value of apiculture at \$140,000; but let us be very modest and say \$100,000. Perhaps my intellect is very feeble, but I really am unable to see that an industry worth \$100,000 is of small importance.

I know nothing of the comparative value of the fruit-industry; but we know that it has a Horticultural Board, whose mileage expenses are paid by the State, a Secretary with a salary of \$1,000, two rooms in the Capitol, a library, a number of display cases, appropriate furniture, a high grade typewriter, stationery, etc.; possibly, on the whole, an annual expense of \$1,500 to the State. Now, if the fruit-industry is worth \$100,000 to the State, why do we not get \$1,500? If it is worth \$200,000 to the State, why do we not get \$750? If it is worth \$500,000, why do we not get \$300? We have a few county inspectors, but the fruit people have theirs, too, except for the publication of our annual report, we get nothing from the State.

SEEMING INJUSTICE.

The truth of the matter seems to be that our legislators being only disposed to appropriate so much anyhow to industries benefiting the State, a few conceive it is to the interest of the industries already represented to keep others out, because every new sharer means a less share to each one. But if this is the case, I would recommend to those who discuss the matter to first recognize statistics to some extent. We bee-keepers may not be politicians, as some are, but we can see the sun at noonday; and if such motives peep out they put ideas in our heads that otherwise we might not have entertained. Injustice arouses a keener desire for justice. Judging by what the fruit-industry receives, what ought another rural industry, contributing as do all rural pursuits to the health of the Nation, not only physically, but morally as well, to have a State appropriation when it reaches the value of \$100,000? A room in the Capitol, expenses for displays both in and out of the State, advertisement of the value of honey as a far healthier food than cane-sugar or commercial glucose, this feature alone being worth more to the State than the whole would cost; a library, an executive administration, either independently or in connection with the Horticultural Board, and a remuneration for the exceedingly necessary and valuable services of a Secretary, which shall be in just proportion to that received by similar officials.

VALUELESS LAND USED.

Let us now suppose that the fruit-industry should be said to be worth some fixt sum of money to the State, such an estimate being based on the net value of the fruit alone. It has been suggested to me that if that were the only base of calculation, the result would be incorrect. The industry would really be worth less. For, as a rule, horticulture takes the best farming land—land that might have been put in grain, hay or potatoes; so that the real value of the horticultural industry, as such, is not represented by the net value of the crop, but by the difference in value between the fruit and the staple which might have been raised on the land the fruit-trees occupy. This will cut down considerably whatever figure may be assigned to horticulture, based on the net value of fruit; and this net value may sometimes be less than nothing, especially in the case of perishable fruit. Two producers of peaches at Montrose got back only enough to pay for the boxes.

On the other hand, estimates of the value of the honey-industry are influenced by no such consideration. Apiaries occupy an exceedingly small portion of land; and this land need not be, and generally is not, of any particular value for other purposes. Not only so, but the product is a spontaneous one in the form of floral nectar, which would utterly go to waste if not for the bees. The value of honey is a clear gain to the State, and, finally, what is not generally understood, honey is as valuable an article of diet as fruit, and should be as plentifully used. Being concentrated, it is one of our cheapest foods. It is not merely to be regarded from the chemical point of view as one of the sugars, but from a hygienic standpoint it is already what the other sugars have to be reduced to before they can be assimilated, thus saving the wear and tear of the system and the tendency to Bright's disease and kindred disorders which the free use of cane-sugar in modern times is causing. The muscular energy which science has discovered to be the result of sugar as food can be obtained in no safer way than by eating honey. It follows that the industry of honey-production is intrinsically valuable, as substituting a cheap and wholesome article for other more or less harmful members for an essential class of foods.

THE SPRAYING LAW.

About the other question, whether our spraying law can be enforced, not much need be said. It is a measure which is highly essential to the well-being of an industry worth \$100,000 to the State, cases having already occurred in which spraying out of season caused direct and great loss to bee-keepers. It does not in any marked degree interfere with the welfare of other industries of the State. Unless these two statements are proved to be false, I do not see that the author of the assertion has any case. If I understand it rightly, he said that some trees would be blooming while others were not, hence the blooming season could not be defined strictly enough to apply the law. It seems to me this is splitting hairs. There is nothing to prevent one tree from being sprayed, when it has finished blooming, while at the same time another tree is not sprayed because it is yet in bloom. The spraying law is in force in Vermont and Washington and the Province of Ontario and perhaps elsewhere, and we have heard of no such objections raised to it.

But it is not enough for us to show the emptiness of such strictures. The very fact that they were made causes a suspicion that a spirit unfriendly to us exists in certain quarters. Last spring it was the Grand Junction horticulturists who for some reason which they did not see fit to impart, opposed the addition of a clause prohibiting the exposure of poisoned mixtures on which bees will work. We gave way to them in that. Now somebody from the Western slope carries opposition a little farther. We are justified in asking "Why?" It is not enough that some Eastern slope fruit-man tells us he doesn't know of any reason for discussion among bee and fruit men. We want to know what is the matter with those Western people.

A PERSONAL STATEMENT.

I have thought that perhaps occurrences in which I was concerned, in both of which cases certain private letters got in the papers without knowledge or intention, may have caused some person or persons who were not acquainted with the facts to assume that such action was intentional, and that it was also done with the connivance of the bee-keepers at large; and, as an inference, that bee-keepers in general are rather a grasping set, who need to know their place. Such assumptions, if they continue to exist, as they have existed (and, by the way, I have never received any assurance that they have ceased to exist, tho I should have expected it), have not an atom of truth. Further, there is not the slightest danger that such assumptions will ever again be even apparently true; for in consequence of the implied ascription of malicious motives which has never been removed, and also because I realize that I have not the necessary business abilities, I have determined hereafter not to do any work for either of our associations which involves any business, except in the way of informal assistance to committees and officers. That settles that. The opposition must show other grounds for their hostility than anything connected with those occurrences, and it would be well for them to recollect that if bee-keepers can be injured in the eyes of horticulturists by mistakes which have the appearance, but not the reality of injustice, horticulturists will surely be injured in the eye of bee-keepers by the genuine article.

THE TIME TO SPRAY.

I am glad to state, however, that in spite of my rather discouraging experience, I suppose that the majority of fruit-men are disposed to be fair-minded and courteous. Mr. A. F. Reeves, the fruit-inspector of Montrose county, I think is such a man. He has made a study of entomology, and appears to be competent. He told me that the spraying law was all right, and a good thing; tho in one respect only it might not be entirely just in its workings, because once in several years a peach-louse makes its appearance, which can only be killed by spraying during bloom. A provision ought to be made to meet this exigency. I recommend that the association correspond with Mr. Reeves on the matter. Whatever provision is made should, of course, do away with the essential part of the law; for not only could we ill afford to have our bees killed by the bushel just at the critical period of their development, but the horticulturists themselves cannot afford to dispense with the services of the bees in securing cross-fertilization, which means more and better fruit; nor can they afford to overlook the fact that, with the small exception noted, they are simply wasting their spraying material in spraying out of season, because all the common insects injurious to fruit can only be reached by spraying after bloom.

F. L. THOMPSON.

Mr. Devinney—No action was taken by the Horticultural Board on the matter.

Mr. Honnet—While some remarks were made, I cannot recollect anything of the kind as having taken place.

Mr. Milleson—If anything was said detrimental to our interests, I fail to remember it, with one or two exceptions. As County Fruit Inspector I have not met more than one or two who gave any indication of ignoring the law. Leading fruit-growers have no opposition to it. It is almost universally conceded that we have rights.

Pres. Alkin—I think that no feeling exists.

On motion of Mr. Devinney, the Association voted that the paper be given to the press for publication.

A LETTER ON SPRAYING FRUIT-TREES.

In the hurry of business the following letter from a bee-inspector of the Western slope was not read before the Association. It will be appropriate here:

"I think there will be a strong effort made to repeal the law that we work so hard for last winter, with regard to spraying during fruit-bloom, and many are making threats now that they will spray while in fruit bloom. I cannot see why any sensible fruit-grower should want to kill off all pollen-bearing insects (bees included) that so greatly assist in the setting of fruit, and that at a time when they are all he does kill. We will do all we can by persuasion up till that time, and then if they insist on spraying, we (the bee-keepers) will see that they atone to the offended law."

A LETTER ON TAXING BEES.

The following letter from a bee-keeper was read, which had been sent to the Secretary of the Denver Bee-Keepers' Association, who, on account of absence, turned it over to Secretary Rauchfuss:

"What I am interested in as I suppose we all are, is the point as to the legal right of assessors to tax bees. All property is taxable unless specially exempted, i. e., all property recognized as such by law. If I understand the scope of the decision of the Attorney General, it is clearly that bees are not property at law in Colorado, and therefore not subject to taxation. It is this phase only of the subject that has practical import to bee-keepers, for I cannot conceive how we can protect at law that which has no standing at law. Of course I know that we can hold bees, birds, fishes and other wild animals, and the law will not interfere, but in case of depredation by others, what is the remedy? What is their legal value? Can an assessor list for taxation? As I understand it, the right to assess carries with it the right of legal protection, and I am of the opinion neither obtains in our State. Situated as you are where you can in the name of the bee-keeping interest have a decision settling these points made, I conceive it would be of great value as determining what course bee-keepers ought to pursue in asking such legislation as may be necessary to surround our interests by the law's protection. I believe I, in my former letter, stated that it had been necessary to have dogs made property by enactment. Surely, they are much more readily held, valued, recognized and recovered than bees. I know that in many places they were taxed, but that was in the nature of a license to provide a fund against their depredations, or for protection."

Mr. Nichols—I am the assessor of Montrose county, and a heavy bee-keeper. I am not posted on the law. My business is merely to list for taxation. They have never objected to taxing bees in Montrose county. Yet many bee-keepers get little or nothing from their bees. The commissioners value every colony at \$1.00. I think it is wrong, and that the assessor should fix the value. I believe a fix valuation of colonies is just as unjust as a military tax, which was considered unjust at the recent assessors' meeting. A year ago I cut down the valuation of bees and equalized them, calling the best \$1.00, some 75 cents, and others lower; but the Board of Equalization said one colony was as good as another, and placed the value of every one at \$1.00.

Several members thought the county had no right to tax bees.

Mr. Rhodes—The real question is, Are bees property in law? Is there a value that can be recovered?

Mr. Nicholas was appointed a committee to interview the Attorney-General on the subject.

Officers were elected for the ensuing year as follows: President, R. C. Alkin; Vice-President, R. H. Rhodes; Secretary, Frank Rauchfuss, Elyria; Treasurer, Mrs. R. H. Rhodes; Member Executive Committee, B. Honnet.

The Committee on Organization and Marketing, consisting of Messrs. Elliott, Whipple, Pease, and Lyon, submitted a report which caused considerable discussion. Some favored the agency plan, some that of a supervision by a Board of Directors. The committee's report, embodying the latter plan, was not acted upon, but a resolution by Mr. Tracy was passed.

that the Association agrees to abide by the action of the committee. This gives the committee time to sound virus and perfect details. The result of their deliberations is expected to be made known at the spring meeting.

A complete recasting of the Constitution and By-Laws was presented by the committee for that purpose, and adopted by the Association, which it is believed will make the Association's work more effective than heretofore.

Mr. Nichols, by request, spoke of his scraping-machine for separators, which saves him some work and expense. The essential feature is two knives with springs.

THE BEE-INSPECTORS' REPORTS.

J. B. Adams, Boulder County—Total number of colonies inspected, 580; number diseased, 32; destroyed, 32.

Thos. A. Riggs, Arapahoe County—Number inspected, 942; diseased, 39; transferred, 26; destroyed, 13.

Peter Kranz, Otero County—Number inspected, 2,738; diseased, 27.

H. Porter, Jefferson County—Number inspected, 2,294; diseased, 15; destroyed, 15.

M. A. Gill, Mesa County—Number inspected, 2,733; diseased, 26; destroyed, 26.

Chas. Adams, Weld County—Number inspected, 18; diseased, none.

Mrs. A. J. Barber, Montezuma County—Number inspected, 192; diseased, 2; destroyed, 2.

FRANK RAUCHFUSS, Sec.

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, MARENGO, ILL.

[Questions may be mailed to the Bee Journal, or to Dr. Miller direct.]

Trimming Down Brood-Combs.

When combs are very rough, is it a good plan to cut them down smooth in the flush of the season? CONN.

ANSWER.—You probably refer to irregularities on the surface of brood-combs. It's a good plan to trim down the worst of these at any time when convenient.

Langstroth and His Invention.

In the Bee Journal I often see a certain Mr. Langstroth mentioned. I suppose he is the inventor of a kind of hive or frame very valuable to bee-keepers. I would like to know something about him, especially the time and place he lived and died, and about his invention. WISCONSIN.

ANSWER.—Rev. Lorenzo Lorraine Langstroth was born in Philadelphia, Pa., Dec. 25, 1810. In 1852 he invented the movable frame, went to Oxford, Ohio, in 1858, and to Dayton, Ohio, in 1857, dying there Oct. 6, 1895.

Carrying Out Brood—Feeding Bees.

1. What is wrong with my bees? Two colonies began gathering pollen the first week in April, and seemed to be doing well, but now in the morning I find some of the brood on the alighting-board, some of which are about nine days old, I judge, and others have wings and eyes formed, some of which seem partly torn to pieces. Some of the former are alive when found. They are in old-fashioned box-hives, so I cannot examine inside very well. One of these colonies swarmed once last summer. The other did not.

2. I have another colony that did not swarm, and seemed to have very few bees all summer. This spring it has gathered no pollen. Are they queenless?

3. What is the best way to feed in box-hives? I intend to get rid of them as soon as possible. NEW YORK.

ANSWERS.—1. The probability is that your bees were near the starving point, hence destroyed brood. Very likely the coming of fruit-blossoms has corrected the trouble.

2. If they carry no pollen when other colonies are carrying in plenty, they are likely queenless, and should be united with another colony. Make a hole in the top of the hive if there is none, then set the hive under another that has a queen.

3. One good way is to use the crock-and-plate method; making a hole in the top of the hive, then covering over so that no bee can get in from the outside without going through the hive.

Getting Bees on New Combs.

I have 10 colonies of bees in standard hives, the combs of which are old and have a great deal of drone-comb in them. I want to get the bees on full sheets of foundation and use the old combs for extracting purposes. I thought of fitting up other brood-chambers with foundation, and raising up the old hive, set the new one under with a queen-excluder between them, with the queen below. Will this do? If not, how shall I do it? INDIANA.

ANSWER.—Sometimes a queen will sulk without laying for some time if confined on foundation below, with brood above the excluder. Give her one frame of brood below by way of encouragement.

Building of Drone-Comb.

1. If a hive-body filled with frames containing starters be placed under a colony of bees, will they build as much drone-comb as they would if it were placed above them?

2. How would you proceed to have a number of brood-frames filled with comb and have as little drone-comb as possible when only starters are used in the frames, and the apiary run for extracted honey? NEW YORK.

ANSWERS.—1. It would be more likely used for brood below, and on that account more likely to be worker; but if used for storing honey there might be no difference.

2. Have the comb built in weak colonies, and in colonies with young queens.

Gathering Pollen and Honey—Alfalfa.

1. Do bees gather honey and pollen at the same load?
2. Do bees get much honey from box-elder?
3. What is the general length of the alfalfa honey-flow?
4. Is there ever a failure of a honey-flow under irrigation?
5. We have thousands of acres of alfalfa, but most of it is kept for seed, and not irrigated, and that which is cut for hay is cut before the first bloom appears. Last year was my first year here, and I saw the bees working on alfalfa only about a week, just before frost. Alfalfa produces from 6 to 8 tons of hay per acre, and from 7 to 15 bushels of seed. Now, if you or any one else can tell me how to handle it, to get a honey-crop, I will be very much pleased. NEBRASKA.

ANSWERS.—1. They often bring honey without pollen, and when they bring pollen they may bring honey with it, perhaps not very often bringing pollen without honey. Possibly that may not be the rule in all localities.

2. I think they do, but I may be mistaken.

3, 4, 5. I confess ignorance, and will be glad if our alfalfa friends will help us out.

Swarming—Cells of Old Combs.

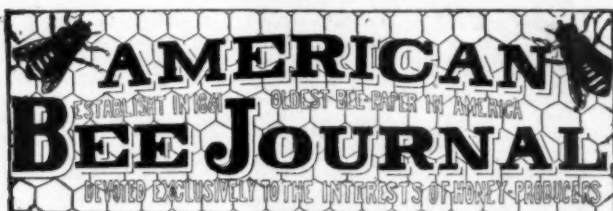
1. Does the queen, or do the bees, cause swarming?
2. Do bees swarm after or before queen-cells are built?
3. Can a queen's wings be clipped with scissors? If so, how?
4. When comb is used for a long time for rearing brood, do the cells get small enough to make the bees under size (for each bee leaves a web, I am told)? IOWA.

ANSWERS.—1. Both work together toward that end, but the immediate impulse to swarming at the time the swarm issues comes at times and perhaps always from the workers. It sometimes happens that a swarm issues when there is no queen in the hive, the queen having been taken away an hour or more before, the bees not having yet found out their queenlessness.

2. Generally queen-cells are prepared and well advanced before a swarm issues.

3. Yes. Hold the queen by the thorax or body (not by the soft hinder part) having the tail toward the hand that holds the scissors. Now cut off as much as you can conveniently from the two wings on the side next you (there are two wings on each side.)

4. Some think a difference in size of bees results. Perhaps most think there is no difference. I never throw away a brood-comb because of its age. The change made in cells is mostly at the bottom, making the thickness of comb greater, but not affecting the size of bees.



GEORGE W. YORK, EDITOR.

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UNITED STATES BEE-KEEPERS' UNION

Organized to advance the pursuit of Apiculture; to promote the interests of bee keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

EXECUTIVE COMMITTEE—Pres. George W. York; Vice-Pres., W. Z. Hutchinson; Secretary, Dr. A. B. Mason, Station B, Toledo, Ohio.

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GENERAL MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

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NOTE.—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

Bees by Freight—Important.—Last week we mentioned the subject of shipping bees by freight in less than carload lots. The petition has gone in to the Western Classification Committee, J. T. Ripley, Chairman, Room 604, Great Northern Hotel, Chicago, Ill. Now what bee-keepers are to do is this: Write the Committee at once, urging the granting of the petition at their next meeting, to be held at Colorado Springs, Colo., June 14. We trust that several thousand bee-keepers will write immediately, addressing as above. There seems good prospects of the petition being granted, if bee-keepers will but show their interest in the matter. Especially the prominent bee-keepers should write, but no matter how few bees you have, your letter will have weight. All letters should reach the Committee by June 5—not later. Better write now.

Bee-Keeping Not a Nuisance.—We have received the following, dated May 16, from General Manager Newman, referring to a case mentioned in his Report, on page 324 of this number:

FRIEND YORK:—I am glad to inform you that Mr. Buchheim, referred to in my Annual Report as having been put in jail on the ground that bee-keeping was a nuisance, has, through the efforts of the National Bee-Keepers' Union, been fully exonerated, and his bail discharged. This was a case where the Union appealed from the Justice Court, which found him guilty of maintaining a nuisance and sent him to jail. I am just informed this morning of the success of our lawyer in the case.

This is another victory for the National Bee-Keepers' Union, which is fully in keeping with its victorious record in maintaining the rights of bee-keepers.

THOMAS G. NEWMAN,
General Manager.

Facing Cases of Comb Honey has considerable attention in the Review. Dr. Miller has a tilt with the editor, the latter claiming the battle because the former allows it to be the correct thing to put the best side of a section out, altho vigorously objecting to the practice of putting the best sections in sight. Mr. Doolittle stands firm on his former ground, giving the testimony of a commission man, who says it is his business to know what is in the middle of the case. Editor Hutchinson feels sure Mr. Hasty did not understand Mr. Doolittle, and thinks it well that Mr. Doolittle "has explained more fully." Whether Mr. Hasty or any one else besides Editor Hutchinson can see anything different from the explanation, remains to be seen. We stand right where we did on page 297. Wrong is wrong, and no amount of explanation will make wrong right.

Death of Chas. F. Muth.—The following item was sent to us by Dr. A. B. Mason, being taken from the Toledo Blade:

"CINCINNATI, OHIO, May 16.—Chas. F. Muth, a prominent and wealthy merchant of this city, and recently elected member of the Board of Control, committed suicide on his farm near Morristown, Ind. He was found dead with a rifle-ball through his head. It is supposed to be a case of sudden insanity, as he was heard to complain of his head."

This is very sad, indeed. We have received no further particulars at this writing, but hope to have more next week.

"Bienenzucht und Honiggewinnung" nach der neuesten Methode. Kurz und klar dargestellt von J. F. Eggers, praktischer Imker bei Grand Island, Nebr. J. F. Eggers, Herausgeber und Verleger, Grand Island, Nebr." So reads the title page of a new book of 50 pages in which bee-keepers from Germany will find in their own loved mother-tongue in condensed form the principles of bee-keeping as practiced in this country. It is well up-to-date, and so simply and plainly written that it may well be recommended as a text-book to bee-keepers who are striving to master the intricacies of the German language.

The price of the book is 50 cents postpaid. It is bound in stiff board covers. Orders may be sent to the Bee Journal office.

Don't Ship Comb Honey by Express.—While it may be somewhat early to say anything about shipping honey, we feel that we ought to refer to a case that came under our observation about two weeks ago.

A prominent Chicago honey-dealer sent for us to come and see a lot of comb honey that he had just received—from a bee-keeper about 50 miles from Chicago. The honey was put up in double-tier out-of-date 24-pound shipping-cases, and two of them had been fastened together by nailing pieces of lath across their ends. There was perhaps 500 pounds of beautiful honey in the shipment. But it wasn't so beautiful when the commission man received it. It was the worst broken up—and broken down—leaky lot of honey we ever saw. It was shipped by express. That, of course, explained it. We could scarcely believe it, when we were shown the shipper's letter, to find that he was an old, experienced bee-keeper, and yet knew no better than to ship such a lot of honey by express! Of course he doesn't read the American Bee Journal.

The producer, in his letter of instructions to the dealer, was very careful to tell how carefully the honey was graded, and how well it was put up; and that he expected a good price for it, of course. But we wouldn't have given 5 cents per pound for it. Why, we wouldn't have wanted such a mess at any price.

It seems strange that after the bee-papers have been so careful to tell honey-producers just how to prepare and ship comb honey, those that should know better will simply go on

in their blindness, and then blame the commission man, very likely, if anything is wrong, or different from what was expected. And yet, if some folks think they know it all, and won't read, they will have to take the consequences, of course.

Now, don't ship comb honey by express. Put the shipping-cases of honey in large crates holding perhaps 200 pounds each, with several inches of straw in the bottom and at the sides of the crate. Then nail a 3 or 4 inch board on each side a third of the way down from the top, letting the boards extend about eight inches at each end, for handles by which two men will carry the crate. Honey thus packed will stand lots of bumping around, and will almost invariably reach its destination without any breakage whatever.

Pacific Bee Journal Discontinued.—We have received the following notice, dated May 8, and signed by Editor Bennett:

The publication of the Pacific Bee Journal has been postponed, owing partly to my connection with the National Guards of California, who daily await orders from the Government to take the field; and partly to the lack of support owing to the unfortunate dry year. I intend to resume the publication at some fitting time, advancing all paid-up subscriptions.

B. S. K. BENNETT.

Money but No Names.—We have received two letters accompanied by a dollar each, but the senders were evidently in such a hurry to pay up that they forgot to sign their names. On the envelop of one the postmark is "Pueblo, Colo.;" on the other, "North Adams, Mass." Will the guilty subscribers please write us at once, so that we can credit the money properly.

A War Relief Fund.—We appeal to our readers to join with us and thousands of other patriotic citizens throughout the country in raising within the next 30 days a relief fund of one million dollars to be placed in the hands of the American National Red Cross and of the Central Cuban Relief Committee, appointed by President McKinley.

We, with other publishers and merchants throughout the country, are volunteering to receive donations of \$1.00 each for the fund. It has been arranged to present every one, who donates \$1.00, with a copy of a beautiful picture, "The Accolade." This picture is a beautiful historical souvenir of this great uprising of the American people to defend and set free outraged Cuba. Every patriotic American should subscribe at once! Your help is needed! Our boys are at the front! Let us stand by them! We do not reserve any commission of any kind, and no profit is made by any persons from this fund.

The souvenir that is given in return for each dollar donated is a work of art fitted to adorn any parlor wall. It is a large picture, 18 by 38 inches in size. It presents Columbia, the allegorical figure of the United States, bestowing the Accolade on wounded Cuba. Judge Noah Davis, of New York, speaks thus of the picture:

"The Accolade is the name of the kiss given as the final ceremony in the bestowment of Knighthood upon the worthy heroes of the Age of Chivalry. It was the token of love for noble deeds—deeds done in the cause of Virtue—in the defense of innocence and in the rescue of the humble and poor. It was therefore 'The Kiss of Love'—the tenderest and sweetest kiss when given in the cause of suffering and helpless humanity.....It is well, then, that in this hour of her awful agony, America should clasp to her bosom the wretched and unhappy Cuba and give her 'The Accolade'—the kiss of charity and love, and the token of hope for peace and happiness, bestowed by a mighty people in the name of God and Liberty."

Now let every one of our readers send promptly to this office \$1.00 toward this Million-Dollar Relief Fund. The cause will commend itself to every liberty-loving humane American.

Remember no commissions are paid to any one for raising this fund. The contributions go intact to the Relief Fund.

All help, and help at once.



MR. HAMILTON PIPER, of Calcasieu Co., La., writes:

"The American Bee Journal is good. The number for May 12 is worth a year's subscription to any bee-keeper."

MR. D. W. HEISE—the Ontario bee-keeping chap that noses around and picks up notes on bees wherever he can find them, for the Canadian Bee Journal—wrote us May 4 that his "bees are all right, but the weather unfavorable."

MR. E. W. BROWN, of Erie Co., N. Y., writing May 16, said:

"I had my first swarm May 13. It was brought down from the top of an apple-tree by my wife, while I was in Buffalo."

DR. PEIRO is now located at Central Music Hall, Chicago. Any of our readers contemplating consulting him are informed that the Doctor will be absent from his office during July. Appointments to see him should be made by letter in advance of starting, to insure certainty of personal interview.

MR. THOMAS G. NEWMAN, of San Francisco Co., Calif., writing us May 12, reported:

"The weather is cold and disagreeable here this spring. Fruit is killed, and of honey there will be none to spare, even if there is enough to keep the bees over."

MR. J. O. GRIMSLEY, of Pickett Co., Tenn., writing us on May 16, said:

"A very backward spring, but bees are working nicely now. Poplar is just in bloom."

Mr. Grimsley edits the bee-department of The Ruralist—a monthly paper published in Maryland.

MR. HARRY S. HOWE is the Secretary of the New York State Association of Bee-Keepers' Societies, organized at Geneva, N. Y., March 16. Mr. Howe's picture appears in the May American Bee-Keeper. He has become famous in his section of the country as the lightning extractor of honey and general all-around apiarian hustler. Howe's all right, "any-Howe."

REV. W. ANDERSON, of Bureau Co., Ill., called on us May 18, when attending a convention in the interest of his (the Congregationalist) church held in Chicago at that time. Mr. Anderson has some 30 colonies, and finds their care both pleasant and profitable. There doubtless are many preachers throughout the country that might find it to their advantage, both physically and financially, to have a few colonies of bees upon which to spend their leisure hours.

MR. G. M. DOOLITTLE, of Onondaga Co., N. Y., writing us May 12, said:

"Since March our spring has been wet and cold—so wet that farmers are 'blue' on account of not being able to get in their crops, and bees have had only two days in which they could get anything from hard maple and willow—the only thing in blossom so far. Bees are really in poorer condition now than they were the middle of March. I will have to feed soon unless good bee-weather comes."

EDITOR HUTCHINSON's father-in-law died May 1, at the age of 74 years. He was a bee-keeper over half his life. Mr. Hutchinson says:

"I remember with pleasure the visits that I made him when scarcely out of my 'teens,' to 'talk bees.' It was during these visits that I made the acquaintance of the girl who has since been my good wife."

Yes, of course Mr. Hutchinson made those visits to "talk bees" to the father, and finally talkt "honey" to the daughter. Great scheme that. Favorably impress the parents, and half the battle is won—sometimes.



An End-Spacer at the Bottom of the frame is strongly recommended by the American Bee-Keeper. A staple driven into the end of the bottom-bar, projecting $\frac{1}{4}$ -inch, so that in rapid handling there will be no danger of crushing bees or queens between the end-bar and wall of hive.

Lime Good for Sweet Clover.—J. E. Crane, in Review, strongly endorses the idea that lime is needed for sweet clover, by saying that at the great marble quarries at Rutland, Vt., sweet clover grew in great luxuriance on the heaps of waste where to the depth of 20 feet there was nothing but marble, or pure lime.

Breeding Out the Swarming Instinct.—"If the desire to incubate has been so nearly bred out of some breeds of fowls," says J. E. Crane, in Review, "why may we not breed out the disposition in bees to swarm? I believe it can be done; and with far less labor and time than the desire in fowls to incubate has been eradicated."

Comb of Buckwheat Heavier than Clover.—"When we take the same brand of foundation and supply it to bees gathering clover honey, and to bees gathering buckwheat honey, we find invariably that there is a very much larger amount of added wax in the case of the buckwheat than in the case of the clover," says Prof. Shutt, in Canadian Bee Journal.

Strength of Flavor in Honey depends somewhat upon the yield, according to E. E. Hasty, in Review. The quantity of essential or flavoring oil seems to be about the same whether the secretion of honey be much or little. Same with coloring matter. So in a heavy yield both color and flavor will be light, and vice versa. Basswood honey is sometimes yellow by scant secretion, and apple honey over-flavored and bitter.

Section-Cleaners, so far, have generally been of sand-paper, which soon clogs and demands renewing. J. E. Crane, in Gleanings, thinks there might be a solid cylinder of emery, a cylindrical spring-wire brush, or a cylinder with knives so set as to wind around it like the threads of a screw, which last would not be likely to clog, or if it did it could be easily cleaned with the point of a knife while revolving very slowly.

Cane vs. Beet Sugar.—Dr. Miller asks in British Bee Journal whether definite experiments have been made as to relative value of the two for feeding bees. The editor says although no experiments have been specially made, it is generally accepted as a proved fact in England that the chemicals employed in making beet sugar are injurious to bees, and strongly advises the use of none but refined cane-sugars.

A Conspiracy seems to be hatching in the brain of the Noter and Picker of the Canadian Bee Journal, who has evidently noted this Boller as one to be pickt upon, and he is trying to poison the mind of that innocent youth, E. E. Hasty, inciting him to deeds of darkness by speaking in some heathen tongue such words as "exterminateannihilatereducchimtoashadow." Such things in a civilized country are dreadful!

Basswood.—"I find by going over my diary that my bees have averaged fully 50 pounds per colony from basswood alone, each year, during the past 25 years.... I never knew of but one season when basswood did not furnish some honey, and that was the last.... When the secretion is at its best, I doubt whether there is such a thing as overstocking a good basswood locality, if 1,000 colonies were located all in one place."—G. M. Doolittle, in American Bee Keeper.

Apple-Bloom is highly valued by G. M. Doolittle, as it is by many others. It comes at a time when it tells greatly on the development of the colony, making it ready for the white clover harvest. As Quinby says: "This season often decides the prosperity of the bees for the summer." The best year Doolittle ever had for apple-bloom was 1877, and that year he got his biggest crop of honey, averaging 166 $\frac{2}{3}$ pounds per colony, spring count, mostly comb honey. One

day in apple-bloom he timed the bees. At 8 o'clock the number of bees that entered the hive in a minute averaged 43; at 10 o'clock, 49; at 1 o'clock, 51; at 5 o'clock, 43. A hive that was weighed gained 8 pounds 2 ounces through the day, and lost 3 pounds 2 ounces by evaporation through the following night, making a net gain of 5 pounds of honey for the day's work, showing that the nectar was very thin.—Bee-Keepers' Review.

A Little Scrap About the Plain Section takes place in the Canadian Bee Journal between Editors Root and Holtermann. The former doesn't want his firm clast as a swindle by pushing what Holtermann calls "a decided humbug." Holtermann replies he only meant it was "a piece of nonsense or folly." Root asks the statement to be pointed out where he said a section without bee-ways would *in itself* give fatter combs, or that a tall section is better filled out than a square one. To this request no reply is made.

Do Not Overstock Your Field.—Suppose within range of your bees throughout the summer there are 4,000 pounds to be gathered, and 80 pounds per year are necessary for each colony for their own use. If you have 50 colonies, and there are no other bees in the neighborhood, your bees will live through but afford no surplus for you. If, however, you have only 25 colonies, and these can gather all the honey, there will be 2,000 pounds of surplus for you. Something to think about.—Bienenzucht und Honiggewinnung.

Cane vs. Beet Sugar.—"There have been cases of dysentery in this county during the past winter, the bees were able to take flights almost daily up to end of January, showing that either cheap beet sugars are often used in preparing bee-food, or that, if cane sugar is used, the food is very badly prepared. I always make my bee-food from cane-sugar, besides feeding up a number of colonies for procrastinating bee-keepers in order to save them, and have not had a single case of dysentery," says Wm. Loveday, in British Bee Journal. He thinks America is just the place to make definite experiments as to using beet sugar for winter, where bees are confined four or five months in cellars. Isn't most of the sugar used for wintering in this country beet sugar? and isn't cane better?

Measurements of Comb-Bases.—The editor of Gleanings (p. 357) says they have a micrometer that measures "the ten-thousandth part of an inch as easily as you would measure off eighths of an inch on a foot-rule," and he has been measuring septums. He thinks the bees do thin the base of foundation slightly. Prof. Beal's measurements, as given in Review, made the base of extra-thin .0056, drawn foundation nearly .0100, Bingham no-wall .0043, and natural about .0067. Editor Root's measurements made the base of natural comb only about half as much, averaging from .0030 to .0036, and he thinks Prof. Beal must have used comb that was built when honey was coming in very slowly. Extra-thin Mr. Root found .0050 to .0060, about the same as Prof. Beal, and thin foundation running 11 feet to the pound .0071. He thinks the drawn foundation can be made with much thinner base by using the natural instead of flat base. He hopes they will be able to make the 18-feet-to-the-pound foundation with base .0030, which will defy connoisseur or micrometer to detect the difference between it and the natural product of the bee.

Drawn-Out Combs, or unfinished sections, to be used over again, are discuss somewhat fully by Dr. C. C. Miller (Gleanings, page 342.) While leaving a loop-hole for possible retreat by saying that he is ready to change his opinion upon sufficient evidence, he combats vigorously the idea previously held by the editor of Gleanings that for good results the cells must not be more than $\frac{3}{8}$ -inch deep, and challenges proof that B. Taylor ever intended leveling for any other purpose than to remove whatever of the edge might be objectionable, and claims it is a waste to cut down a cell, no matter how deep, after such objectionable part is removed. "One reason given for having cells not more than $\frac{3}{8}$ -inch deep is that, when deeper, the comb is tough. If there is any difference, ought not the part of the comb last made be the most tender? Then why cut away that, leaving the toughest part? Another is that with cells more than $\frac{3}{8}$ -inch deep, the honey is not as thick and of as nice quality.... If it is true that a cell $\frac{3}{8}$ or $\frac{1}{2}$ deep is better than a deeper one just because of its depth, I don't for the life of me see how it is possible to get away from the logical conclusion that the greater the depth the poorer the honey, and the less the depth the better the honey, the best honey of all being produced on the Michigan no-wall foundation."

GENERAL ITEMS

Bees Doing Well.

I had three swarms last week during fruit-bloom, and all are doing well. Who can beat that? Alfalfa blooms in two weeks. Kansas is all right.

SILAS HARTER.

McPherson Co., Kan., May 15.

Colonies Short of Stores.

Bees have wintered very well, but we are having a very backward spell for them just now, and they are short of stores.

CHAS. ALEXANDER.

Onondaga Co., N.Y., May 16.

Too Dry in California.

It is too dry here. No honey in California this year. Most of the bees will starve if not fed. I have 75 colonies, and only two swarms, up to date.

DAN CLUBB.

Tulare Co., Cal., May 9.

Looking for Swarms Daily.

My bees have wintered well. I have 80 colonies, losing two in wintering. The Italians robbed them. I am looking for swarms every day.

P. E. CAMFIELD.

Shelby Co., Ill., May 16.

Beats Previous Records.

The weather has not been very warm so far this spring, but my winter and spring loss at the home apiary is only one colony out of 73, and this present condition beats all previous records, as over $\frac{1}{4}$ of them have queen-cells, ready for swarming, and fruit-bloom is only commencing to open.

FRANK MCNAY.

Columbia Co., Wis., May 10.

Good Indications Now.

Fruit-trees are in full bloom, and the bees are working heavily on them, but we were having rain for the last three days, so they could not work. I put 18 colonies into winter quarters, and did not lose one—all came out good and strong. The indications at present are for a good honey crop this year.

JOHN H. RUPP.

Washington Co., Kan., May 17.

Italian Bees' Honey—Foul Brood.

Mr. A. W. Hart, on page 269, asks how it is that the Italian bees produce a finer quality of honey than the blacks or others, when all have access to the same forage. The editor thinks here is a chance for some one to distinguish himself. Let me take that chance.

You know, nature and the breeder's influence create different constitutions. For example, take 10 cochin with 10 leghorns. Let all have access to the same forage and you will have different quantities, qualities and even colors of eggs. What's the cause? You say, "Well, Asiatic hens are more flesh-producing; and Mediterranean hens more egg-producing." That's right, but that's not all. Nature and the breeder's influence did something besides that. It made

BEE-BOOKS

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Bees and Honey, or Management of an Apiary for Pleasure and Profit, by Thomas G. Newman.—This edition has been largely re-written, thoroughly revised, and is "fully up with the times" in all the improvements and inventions in this rapidly-developing pursuit, and presents the apiarist with everything that can aid in the successful management of an apiary, and at the same time produce the most honey in an attractive condition. It contains 250 pages, and 245 illustrations—is beautifully printed in the highest style of the art, and bound in cloth, gold-lettered. Price, \$1.00.

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Practical Hints to Bee-Keepers—by CHAS. F. MUTH. Also contains a Foul Brood Cure and How to Winter Bees. 40 p.; 10 cts.

Why Eat Honey?—This Leaflet is intended for FREE distribution, to create a Local Market. 100 copies, by mail, 30 cts.; 500 for \$1.25; 1000, \$2.00.

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(Read Carefully.)

The following clubbing prices include the American Bee Journal one year with each book named. Remember, that only one book can be taken in each case with the Bee Journal a year at the prices named. If more books are wanted, see postpaid prices given with the description of the books on this page. Following is the clubbing-list:

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2. A B C of Bee-Culture.....	2.00
3. Bee-Keepers' Guide.....	1.75
4. Bees and Honey [Cloth bound].....	1.65
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Frank B. Barkley Mfg. Co., 835 Old Colony Bldg., Chicago, Ill., will sell you a bicycle or sewing machine direct from factory.

the leghorns active, and this activity made them hardy. So a leghorn hunts and hunts; it gets all that makes an egg fine and rich. With bees it is the same. Italians are more active and more hardy than others. You may see them flying soon in the morning and late in the evening, when others stay at home. So they have more chance to produce fine honey than others. Certainly, the bees "make" the honey, but first they must have something to make it from. It is not red clover they need, but they need plenty to select the best. Therefore do not breed from all Italian colonies—breed only from the most active. As a rule, even Italians show exceptions.

Mr. E. S. Lovesy, of Salt Lake Co., Utah, gave a copy of Utah's new foul brood law, providing that an inspector shall visit all colonies of bees at least once a year, and as many more times as may be necessary. Such inspections of hives without a good education of bee-keeping is monstrous. Don't call a State-guard when you may guard yourself. Perhaps Mr. Lovesy will be kind enough to tell why Utah's bee-keepers can't guard themselves as well as an inspector can. J. VOLKERT.

Chesterfield Co., Va.

All Wintered.

I have 34 colonies that I wintered outdoors, and they have come through in good condition. My wife and I examined the 24 colonies to-day, and elipt the queens in all but two, where there were so many bees I could not find her. During the past year I have sold \$160 worth of honey, besides using all we wanted, which is a large quantity, as I have a large family. LUTHER BROWN.

Litchfield Co., Conn., May 10.

No Loss in Wintering.

We wintered 30 colonies of bees without a single loss. All are now very strong except one. They work well whenever the weather is warm enough. There is a little new honey and plenty of old in the brood-chambers. We expect a good season and ready market for all the honey we can get.

The American Bee Journal is a wonderful help to me. F. C. McCLAIN.
Mason Co., Mich., May 12.

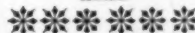
Perforated-Tin Section-Cleaner.

Believing that I have solved the difficulty connected with the use of sand-paper for cleaning sections, I thought possibly it might interest the readers of the American Bee Journal to know how. I have a frame made like the Aspinwall, having a small roller like his, also a disk 12 inches in diameter, but I believe Mr. Aspinwall has given us the only correct principle, as a disk brings the work too far from the shaft, thus requiring too much power for a foot lever.

With a 2½-inch roller I first cover it with tin tacked on for protecting the wood from hot water or fire. Next I cut another sheet of tin the size to cover the roller. This sheet I tack on a smooth, hard board, then with a little nail filed to a long, tapering point I perforate this sheet as closely as can be done, never driving the nail up to where it is even sized, thus leaving the perforations like an inverted cone. When done, tack this sheet on the roll, tightly sinking the tack heads with a



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Truly, W. H. EAGERTY, Cuba, Kansas.
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February 21, 1898. A. F. SEWARD, Riverside, Calif.
9A9t T. F. BINGHAM, Farwell, Michigan.

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That covers the whole Apicultural Field more completely than any other published, send \$1.25 to Prof. A. J. Cook, Claremont, Calif., for his

Bee-Keeper's Guide.

Liberal Discounts to the Trade.

PATENT WIRED COMB FOUNDATION

Has No Sag in Brood-Frames

Thin Flat-Bottom Foundation

Has No Fishbone in the Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made

J. A. VAN DEUSEN,

Sole Manufacturer,
Sprout Brook Montgomery Co., N. Y.

BEE-KEEPERS! Let me send you my 64-page Catalog for 1898,
J. M. Jenkins, Wetumpka, Ala.

Please mention Bee Journal when writing

Frank B. Barkley Mfg. Co., 835 Old Colony Building, Chicago, Ill., will sell you a spray pump, gas engine, or cider press, direct from factory.

punch. Now run the machine rapidly, holding a file lightly on these sharp points, until the work done on sections is smooth.

I think by following these directions you will have the very best section-cleaner that has come to my notice. It does the work smoothly and rapidly, and these little cone points show little tendency to clog, but the propolis is almost entirely removed by holding a piece of soft wood on, and reversing the machine; but it can be cleaned with hot water or steam, or by holding a blaze under it may all be burned off.

This has the merit of being cheap. Any one can make it. It is also durable, as one will last years; and last, but not least, I believe it can be made to satisfy every demand for good work. My large belt wheel is 21 inches in diameter, the belt pulley above is 1 1/4 inches, with 2 1/4-inch roller. These put on a 1/2-inch shaft giving very high speed.

Montrose Co., Col. JNO. S. BRUCE.

Eupatorium Aromaticum.

The plant sent by Mr. Bucy, of Kentucky, is one of the large genus *Eupatorium*, to which belong the bonesets, thoroughworts, Joe pye weeds. The plant in question is probably *E. aromaticum*.

Prof. Cook says of the Eupatoriums, speaking of July plants, for honey purposes: "Now commence to bloom the numerous Eupatoriums, or bonesets and thoroughworts, which fill all the marshes of our country, and the hives, as well, with their rich, golden nectar."

All the Eupatoriums, as I have before stated, are well worth cultivating by bee-keepers for their superior honey-producing qualities.

H. S. PEPOON, M. D.

[Dr. Pepon is the biologist in the Lake View High School. Flower samples may be sent to him at 539 Byron Street, Chicago, Ill. He will then report on them through the Bee Journal, if so requested.—Ed.]

Wintered Well and Booming Now.

Bees are booming, and swarming since the first of May. I have some colonies that are storing honey in the sections, from fruit-bloom. I have 17 colonies—did not lose one during the winter—and were all on the summer stands. I have never before had such a strong, clean lot of bees at this season of the year, and will say for the benefit of "Iowa," on page 294, that I gave them top ventilation, too, but with different results.

I started with 12 colonies last season, which gave me 526 pounds of comb honey, mostly clover. My bees carried in pollen on the first day of March, and on the first day of April drones were flying. How is that for Western Pennsylvania?

T. C. KELLY.

Butler Co., Pa., May 16.

Honey from Willows, Etc.

My bees did well last season, altho my neighbors' bees did nothing. I got from 100 to 125 pounds per colony, and we have good prospects this season, if we get rain soon enough to keep clover booming, for that is our main flow. I got about 24 pounds per colony this spring from white willow.

I have to believe our success is from



\$100

Given as Bounties to purchasers of the improved Danz. Hives and Sections. See schedule in my bee-book "Facts About Bees." Tells

how to produce honey that sells for the most money. Free for 2c in stamps. Address

THE A. I. ROOT CO., Medina, Ohio,
or F. DANZENBAKER, Box 466, Washington, D. C.

Please mention Bee Journal when writing.

Excelsior Incubator and Brooder Cheap

200 eggs capacity. Good as new. Used for only two hatches. Everything complete. Will sell it for

TWENTY DOLLARS, half the cost price
Address, **P. W. DUNNE,**
River Forest, Cook Co., Ill.

Texas Queens

Best honey-gathering strain in America. Tested, \$1.50. Untested, \$1.00. Write for a Circular. **J. D. GIVENS, Lisbon, Tex.**
7A26t Please mention the Bee Journal.



BEE-KEEPERS' SUPPLIES!
Largest and Best equip
Factory in the
SOUTH-WEST.

Send for Catalog.

FRED A. DALTON,
1A26t WALKER, Vernon Co., Mo.
Please mention Bee Journal when writing.

Queens, Bees and Bee-Keepers' Supplies

Tested Queens in April and May, \$1.00. Untested, 75c. Choice Breeders, either three or five-banded Italians, at \$2.00. Choice Imported Breeders, \$5.00. Satisfaction guaranteed. Send for Price-List to

F. A. CROWELL,

8Atf GRANGER, MINN.
Please mention Bee Journal when writing.

Bees for Sale in Indiana!

Italian Bees in 8-frame Langstroth hives. Per colony \$5.00; 5 or more at one time \$4.50 per colony. I have only a limited number for sale. They are strong colonies, and ready for business. Address, **W. H. WATTS,**
19Atf Ross, Lake Co., Ind.



SEE THAT WINK!

Bee-Supplies! Root's GOODS at Root's Prices.

Pounder's Honey-Jars, and every thing used by bee-keepers. Prompt service, low freight rate. Catalog free. **Walter S. Ponder,**
512 Mass. Ave.,
INDIANAPOLIS, INDIANA.

QUEENS Italian stock. Untested, 70c each; 3 for \$2.00. After July 1.50 cents each; tested, \$1.00 each. **Root's Goods at Root's Prices.** Prompt shipment and satisfaction guaranteed. Catalog free

THEODORE BENDER,
Canton, Ohio.

First Excursion of the Season to Cleveland

via Nickel Plate Road, June 3 to 6, inclusive. \$11.35 for the round-trip on certificate plan. Tickets good returning until June 13, inclusive. Three through trains daily from Van Buren Street Passenger Station, Chicago. For further information address J. Y. Calahan, General Agent, 111 Adams Street, Chicago. Telephone Main 3389.

reading the Bee Journal. When I first took the Bee Journal my wife would hardly notice it. She said that was the driest truck she ever tried to read. But now if I come home Thursday nights without it, the first thing I hear is, "Where is the Bee Journal?" The only excuse I have is, "I haven't been to the post-office." Then she says to the little girl, "Won't you go and get it for papa?" But when it comes, mamma's hand is ready to receive it, and see the new items. I got her to read it by asking her to read aloud to me.

My bees wintered nicely without any loss whatever, and they came out of the cellar good, strong colonies.

NATHAN RICHARDSON.
Steele Co., Minn., May 16.

Excursion to Cleveland.

The Nickel Plate Road will sell tickets from Chicago to Cleveland and return at a fare and one-third for the round-trip on certificate plan, good going June 3, 4, 5 and 6, and good returning until June 13, inclusive, on occasion of the annual meeting of the Congregational Home Missionary Society in that city. This rate will be \$11.35 for the round-trip, which is somewhat lower than via other lines. Those desiring space in sleeping-cars should make early application in order to secure the best accommodations.

Any further information cheerfully given by addressing J. Y. Calahan, General Agent, 111 Adams Street, Chicago. Telephone Main 3389.

Frank B. Barkley Mfg. Co., 835 Old Colony Building, Chicago, Ill., will sell you carts, wagons, buggies, carriages and harness direct from factory. 21A4t



WHAT

part of a wagon wears out first? The wheels, of course. Why not buy wheels that can't wear out?

When a man buys the **ELECTRIC WHEELS** he always has good wheels on his wagon. They can't Rot, Warp or become Loose; no re-setting of tires; they fit any wagon. We also make wheels to fit anything wearing wheels. Send for circulars and prices.

Electric Wheel Co.
Box 16 Quincy, Ill.

Please mention Bee Journal when writing.

COMB FOUNDATION Wholesale and Retail.

Working Wax into Foundation for CASH A Specialty.

Hives, Sections, and a full line of Supplies. The best of everything. Write for Catalog, with prices, and samples of Foundation and Sections.

BEESWAX always wanted for cash or trade.

GUS DITTMER,
AUGUSTA, WIS.

Please mention Bee Journal when writing.



WOVEN WIRE FENCE

With our Duplex Automatic Machine you can make a genuine Rabbit-Proof fence, and one that is also Horse-high and Bull-strong for 12c. and a Stock or Chicken fence for 18c a rod. Plain, Colled Spring and Barbed wire to farmers at wholesale prices. Catalogue Free. KITSILMAN BROTHERS, Box 138, Ellettsville, Indiana.

45Dtf Please mention the Bee Journal.

Page & Lyon Mfg. Co. New London, Wisconsin.

Operates two sawmills that cut, annually, eight million feet of lumber, thus securing the best lumber at the lowest price for the manufacture of

Bee-Keepers' Supplies.

They have also one **One of the Largest Factories** and the latest and most-improved machinery for the manufacture of

Bee-Hives, Sections, Etc.,

that there is in the State. The material is cut from patterns, by machinery, and is absolutely accurate. For Sections, the **clearest and whitest Basswood** is used, and they are polished on both sides. Nearness to Pine and Basswood forests, and possession of mills and factory equip't with best machinery, all combine to enable this firm to furnish the

Best Goods at the Lowest Prices.

Send for Circular and see the Prices on a Full Line of Supplies. Please mention the American Bee Journal.

7Atf

Italian Bees For Sale !!

We have arranged with a large bee-keeper in Lee County, Ill., (about 100 miles west of Chicago), to fill our orders for Italian Bees at the following prices there, which include a good Queen with each colony:

8 L. frames of bees in light shipping-case, \$3.75 5 at \$3.50 each.

8 L. frames of bees in dovetailed hive, \$4.25 5 at \$4.00 each.

Prompt shipment after May 1, and safe arrival and satisfaction guaranteed. Address

GEORGE W. YORK & CO.,
CHICAGO, ILLS.

Please mention Bee Journal when writing.

The Largest and Most Complete Stock

Of Bee-Keepers' Supplies in the North-west. The very latest up-to-date and best Hives made, Danzenbaker Hives. Hives for Slotted Sections, and a very low-priced Hive, and carloads of other goods, all in our warehouse ready to ship.

THE A. I. ROOT COMPANY,
H. G. ACKLIN, Manager.
17A5t 1024 Mississippi Street, St. Paul, Minn.
Please mention Bee Journal when writing.

Cash PAID FOR Beeswax

For all the Good, Pure Yellow Beeswax delivered to our office till further notice, we will pay 27 cents per pound, CASH. No commission. Now if you want cash, promptly, for your Beeswax, send it on at once. Impure wax not taken at any price. Address as follows, very plainly,

GEO. W. YORK & CO.
118 Michigan st., CHICAGO, ILL.

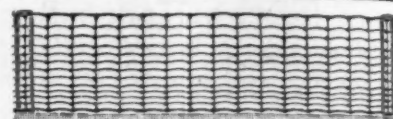


FINE FOUNDATION AND TONS OF IT.
Working Wax into Foundation a Specialty.

Millions of Sections — Polished on both Sides !!

SATISFACTION GUARANTEED on a full line of Supplies. Send for a Catalogue and be your own judge. Wax wanted at 26 cents cash, or 28 cents in trade, delivered to me.

AUGUST WEISS, Hortonville, Wisconsin.



Armed Intervention

is not necessary to the peace of stock or safety of crops about which **Page Fence** is erected.

PAGE WOVEN WIRE FENCE CO., Adrian, Mich.
Please mention Bee Journal when writing.

ITALIAN Bees and Queens

Queens \$1.00; Bees by the pound \$1.00; Nuclei, two frames with Queen, \$2.00; one-frame \$1.50. Also **Barred and White F. Rocks** and **Silver-Laced Wyandottes**. Eggs for sitting at \$1.00 per 15.

17A8t **MRS. A. A. SIMPSON, Swarts, Pa.**
Please mention Bee Journal when writing.



ONE MAN WITH THE UNION COMBINATION SAW

Can do the work of four men using hand tools, in Ripping, Cutting-off, Mitring, Rabbeting, Grooving, Gaining, Dadoing, Edging-up, Jointing Stuff, etc. Full Line of Foot and Hand Power Machinery Sold on Trial. Catalogue Free.

SENECA FALLS MFG. CO.,
46 Water St. SENECA FALLS, N. Y.
Please mention Bee Journal when writing.

RUMELY ENGINES

either Traction, Portable, Semi-Portable, Simple and Compound represent full engine value. Make also Threshers, Horse Powers, Saw Mills, etc. Each is the best of its kind for the purpose. More about them in our descriptive catalogue—SENT FREE. Write for it to-day.

M. RUMELY CO., - LA PORTE, IND.

DR. PEIRO,

CENTRAL MUSIC HALL, CHICAGO.

Please mention Bee Journal when writing.

**Queen-Clipping Device Free**

The Monette Queen-Clipping device is a fine thing for use in catching and clipping queens' wings. We mail it for 30 cents; or will send it FREE as a premium for sending us ONE NEW subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device.

GEORGE W. YORK & CO.,
CHICAGO, ILL.

FREE FOR A MONTH.

If you are interested in sheep in any way you cannot afford to be without the best and only weekly sheep paper published in the United States.

WOOL MARKETS AND SHEEP

has a hobby which is the sheep breeder and his industry, first foremost and all the time. Are you interested? Write to-day. Wool Markets & Sheep, - - Chicago. Please mention Bee Journal when writing.

BEES, HONEY, MONEY

Queens for Business.
Supplies at Bottom Prices.

"Bee-Keeping for Beginners," price 50 cents, imparts the instruction. Price-List free.

J. P. H. BROWN, Augusta, Ga.

Catalog Free A. I. Root & Co's Goods for Missouri and other points, to be had at factory prices from John Nebel & Son, High Hill, Missouri. 9Atf
Please mention Bee Journal when writing.

BEES! Florida Italian QUEENS!

Tested Queens, \$1.00 each; Untested, 50c. Prompt and satisfactory dealing.

Address, E. L. CARRINGTON,
De Funiak Springs, Fla.
Please mention Bee Journal when writing.



Bee-Hives, Sections, Shipping-Cases—everything used by beekeepers. Orders filled promptly. Send for catalog. MINNESOTA BEE-KEEPERS' SUPPLY MFG. CO., Nicollet Island, Minneapolis, Minn.

Please mention Bee Journal when writing.

Van Deusen Thin Foundation...

We have several 25-pound boxes of Van Deusen Thin Flat-Bottom Comb Foundation for sale, at \$12.50 per box. This Foundation is preferred by many. As we have only a few boxes of it, an order for same should be sent promptly. Address The A. I. Root Co., 118 Michigan Street, Chicago, Ill.

Congregational Home Missionary Society

meeting will be held in Cleveland, Ohio, June 7 to 9, inclusive, account of which the Nickel Plate Road will sell tickets at \$11.35 for the round trip on certificate plan. Dates of sale June 3, 4, 5 and 6, inclusive. Tickets good returning until and including June 13. For further particulars address J. Y. Calahan, General Agent, 111 Adams Street, Chicago. Telephone Main 3389.

HONEY and BEESWAX**MARKET QUOTATIONS.**

Chicago, May 19.—Very little call for honey, and the offerings also limited. Prices without change from late quotations. California extracted sells well and the stocks here are light. Weather now warm and prospects generally reported good in the surrounding States. Beeswax scarce, and 27 to 30c is bid for it. R. A. BURNETT & Co.

Kansas City, May 19.—The supply of 1897 comb and extracted honey is about all sold. Considerable inquiry for new comb. Something fancy would bring a good price. C. C. CLEMONS & Co.

Cincinnati, May 21.—Demand is slow for all kinds of honey, especially comb. Prices for best white comb honey, 10 to 13 cents. Extracted honey brings 3 1/4 to 5c, according to quality. Beeswax in good demand at 25 to 28c for good to choice yellow. CHAS. F. MUTH & SON.

Boston, May 20.—Fancy No. 1, in cartons, 13c.; in glass-front cases, 12c.; A No. 1, 11c.; No. 1, 9 to 10c.; No. 2, no sale. Extracted, white, 6 1/2 to 7c.; light amber, 5 1/2 to 6c. Beeswax is in very light supply, and if pure would readily bring 27c.

There is nothing new to note in our market for honey. As usual at this time of year, the demand has dropped to almost nothing, but as the supply is light, prices are well maintained and firm. BLAKE, SCOTT & LEE.

Cleveland, May 20.—Fancy white, 12 to 12 1/2c.; No. 1, 11c.; No. 1 amber, 9 to 10c.; buckwheat, 8c. Extracted, white, 6c.; amber, 4 to 5c. A. B. WILLIAMS & Co.

San Francisco, May 11.—White comb, 8 1/4 to 10c.; amber, 6 1/4 to 7 1/4c. Extracted, white, 5 1/2 to 6c.; light amber, 4 1/2 to 5 1/2c. Beeswax, 23 to 25c.

The French bark Alcee, sailing Sunday for London, carried 135 cases of extracted honey. This will probably be the last shipment to Europe for some time. Stocks of extracted are now very light. Comb is still in fair supply. Values throughout are being well sustained.

Detroit, May 21.—Fancy white honey is lower and now quoted at 11c. No. 1, 9 to 10c.; fancy dark, 7 to 8c.; No. 1 dark, 6 to 7c. Extracted, white, 5 to 6c.; dark, 4 to 5c. Beeswax 27 to 28c.

There are no changes in quotations, and very little desirable honey left. Sales are so slow that it is difficult to quote. The poor lots are being pushed at what they will bring. M. H. HUNT.

Minneapolis, May 20.—Honey much more encouraging. Fancy white clover comb is selling here now at 10 1/4 to 11 1/4c. Not advisable to ship darker than amber. Extracted fancy white clover, 5 1/2 to 6c.; amber, 5c.; dark, 4 to 4 1/2c.

Outlook for honey much more encouraging. S. H. HALL & Co.

Indianapolis, May 21.—Fancy white 11 to 13c.; No. 1, 10 to 11c.; fancy amber, 9 to 10c. Extracted, white, 5 to 6c. Beeswax, 25 to 27c. Market appears to be well supplied and sales are rather slow for this time of the year. This is especially true of the amber and dark grades of comb honey. Beeswax is in good demand. WALTER S. POWDER.

Milwaukee, May 20.—Fancy 1-pound sections, 11 to 12c.; A No. 1, 10 to 11 cents; No. 1 8 to 10c.; amber, 8 to 8 1/2c.; dark, 7 to 7 1/2c. White extracted in barrels and kegs, 5 1/2 to 6c.; amber, 5 to 5 1/2c. Beeswax, 26 to 28c.

The demand for honey continues very good indeed, and values fairly sustained. While the best grades are most salable, the inferior grades meet attention, and the movements are quite satisfactory. A. V. BISHOP & Co.

Buffalo, May 21.—There is a very good demand for strictly fancy 1-pound comb, at 10 to 11c.; other grades, however, range from 9 to 7c., and even 6c. when poor enough. Quite an amount of honey can be sold at this range. Extracted ranges from 4 to 6c., with a moderate demand. BATTERSON & Co.

St. Louis, May 20.—Fancy white comb, 10 to 11c.; No. 1, 10c.; amber, 9 to 10c.; dark, 8 to 9c. Extracted, white, 5 1/2 to 6c.; amber, 5 to 5 1/2c.; dark, 4 to 4 1/2c. Beeswax, 20 to 22c. WESTCOTT COM. CO.

Convention Notices.

Central California.—The next annual meeting of the Central California Bee-Keepers' Association will be held at Hanford, Cal., Wednesday, June 1, 1898, at 10 o'clock a.m. Election of officers and other important business to be attended to.

W. A. H. GILSTRAP, Sec.

Caruthers, Calif.

Fresno Co., Calif.—The next quarterly meeting of the Fresno County Bee-Keepers' Association will be held at the City Hall, in Fresno, Calif., Wednesday, June 8, at 1 o'clock p.m. Constitution and By-Laws are to be adopted. Marketing honey and other business is to come up for consideration.

W. A. H. GILSTRAP, Sec.

Caruthers, Calif.

EGGS

From pure bred, barred P. Rocks. Large and fine plumaged, \$1.00 per 15. Also Light Braemas and Black Langshans, same price. B. P. Rock Cockerels, \$1.25.

MRS. L. C. AXTELL,
ROSEVILLE, ILL.

Please mention Bee Journal when writing.

READY TO MAIL

My 40-page Catalog of my Specialties, and Root's Goods at their prices. I carry a full line of BEE-KEEPERS' SUPPLIES, and can ship promptly. Catalog Free.

GEO. E. HILTON, Fremont, Mich.

Please mention Bee Journal when writing.

Two Special Offers.

As explained in former ads., publishers can afford to put forth extra efforts in securing new subscribers; as the majority remain, once they become subscribers to a good journal. It is from this point of view that I make the following offers:

Offer No. 1.

To any one not a subscriber to the Review who will send me \$3.00, I will send the Review for 1898 and 1,000 strictly first-class, snow-white one-piece Sections. After accepting this offer if any one wishes to buy more sections, I will furnish them at the following prices: 1,000, \$2.75; 2,000 for \$5.25; 3,000 for \$7.50; 5,000 for \$12.00. Sections will be shipped from any of the following points: Flint, Mich.; Chicago, Ill.; Medina, O.; Jamestown, N.Y.; Higginsville, Mo., or Omaha, Neb.

Offer No. 2.

To any one not a subscriber to the Review who will send me \$1.50, I will send the Review one year and a fine, TESTED Italian Queen. Purchasers may have either the bright, golden strain, or the dark leather-colored reared from imported mothers. After accepting this offer, if any one wishes more queens, they will be furnished at the following prices: Single queen, 90 cts.; 3 for \$2.65; 6 for \$5.00; 12 or more at 75c each. Orders will be filled in rotation, and safe arrival guaranteed.

Unless otherwise ordered subscriptions will begin with the January issue; and the December, 1897, number will also be sent, free.

If you are not acquainted with the Review, and wish to see it before subscribing, send 10 cents for three late but different issues, and the 10 cents may apply on any subscription sent in during 1898. W. Z. HUTCHINSON.

FLINT, MICH.



Please mention Bee Journal when writing.

Frank B. Barkley Mfg. Co., 835 Old Colony Bldg., Chicago, Ill., will sell you a Feed Cooker direct from the factory.

Talk about Comb Foundation

WE can now furnish the very best that can be made from pure wax. Our New Process of Milling enables us to surpass the previous efforts of ourselves and others in the manufacture of Comb Foundation.

It is always Pure and Sweet.
It is the kind that does not sag.
It is the kind you want.

If you once try it you will have no other. Samples furnished **FREE**. Large illustrated Catalog of all kinds of

Bee-Keepers' Supplies,

And a copy of the American Bee-Keeper, sent upon application. Address,

THE W. T. FALCONER MFG. CO.,
JAMESTOWN, N. Y.

NEW YORK, is the city,
105 Park Place, is the street,
I. J. STRINGHAM, is the man

Who is prepared to ship you, on short notice, **anything** in the apiarian line.

Are YOU the man who wants to buy?

Send for Catalog, anyway.

Please mention Bee Journal when writing.

CARLOADS—



Of Bee-Hives, Sections, Shipping-Cases, Comb Foundation, and **Everything** used in the Bee-Industry.

We want the name and address of every Bee-keeper in America. We supply Dealers as well as consumers. We have Dry Kiln, Improved Machinery, 40,000 feet of floor space, and all modern appliances. We make prompt shipment. Write for Catalogs, Quotations, etc.

Inter-State Manufacturing Co.,
HUDSON, St. Croix Co., WIS.

Please mention Bee Journal when writing.

The A. I. Root Co.'s Goods Wholesale. Retail.

Including their discounts for Goods wanted for use another season. It will pay you to send me list of Goods wanted. **M. H. HUNT** Cash for Beeswax. **BELL BRANCH, MICH.**

Please mention Bee Journal when writing.

I ARISE



TO SAY to the readers of the **BEE JOURNAL** that **DOOLITTLE**

has concluded to sell **BEES** and **QUEENS**—in their season, during 1898, at the following prices:

One Colony of Italians on 9 Gallup frames, in light shipping-box	\$6 00
Five Colonies.....	25 00
Ten Colonies.....	45 00
1 untested queen.....	1 00
6 " queens.....	5 50
12 " ".....	10 00
1 tested Queen.....	\$1 50
3 " Queens.....	3 50
1 select tested queen.....	2 00
3 " Queens.....	4 00

Select tested queen, previous season's rearing... 3 00
Extra Selected for breeding, **TIE VERY BEST**... 5 00
About a Pound of **BEES** in a Two-frame Nucleus, with any Queen, \$2.00 extra.

Circular free, giving full particulars regarding the Bees and each class of Queens.
Address

G. M. DOOLITTLE,

1A2t BORODINO, Onon. Co., N. Y.

21st Year Dadant's Foundation. 21st Year

Why does it sell so Well?

Because it has always given better satisfaction than any other. Because **IN 21 YEARS** there have not been any complaints, but thousands of compliments.

We Guarantee Satisfaction.

What more can anybody do? **Beauty, Purity, Firmness, No Sagging, No Loss. PATENT WEED PROCESS SHEETING.**

Send Name for our Catalog, Samples of Foundation and Vell Material. We sell the best **VEILS**, cotton or silk.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

LANGSTROTH ON THE HONEY-BEE, Revised.
The Classic in Bee-Culture—Price, \$1.25, by mail.

Foundation and Beeswax Prices Advanced.—We quote an advance of three cents in Foundation, wholesale and retail, on the prices quoted in our Circular. **BEESWAX WANTED**, at advanced prices also.

CHAS. DADANT & SON,

Please mention the Am. Bee Journal.

HAMILTON, Hancock Co., ILL.

OUR MOTTO—"Well Manufactured Stock! Quick Shipments!"

SECTIONS, SHIPPING-CASES, —AND— BEE-KEEPERS' SUPPLIES.

We make a specialty of making the very best Sections on the market. The **BASSWOOD** in this part of Wisconsin is acknowledged by all to be the best for making the **One-Piece Honey-Sections**—selected, young, and thrifty timber is used.

Write for Illustrated Catalog and Price-List **FREE**.

MARSHFIELD MFG. CO., Marshfield, Wis.

Please mention the American Bee Journal when writing.

ROOT'S GOODS.

Our
Specialties:

The Fence and Plain Sections.
Weed New Process Foundation.
Cowan Extractors.
Porter Bee-Escapes—the best made.
Dovetailed Hives—with Danz. Patented Cover and Bottom.
Danzenbaker Hives.
No-Drip Shipping-Cases.
Gleanings in Bee-Culture, Illustrated, Semi-Monthly.

Catalog of Goods and Sample Copy of Gleanings sent for your name on a postal.

THE A. I. ROOT CO.
MEDINA, OHIO.

Branch Offices:

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1635 W. Genesee St., Syracuse, N. Y.
10 Vine Street, Philadelphia, Pa.
Mechanic Falls, Me.